

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-8 (Canceled).

Claim 9 (New): An optical waveguide formed from an optical waveguide-forming material, said optical waveguide-forming material comprising a photocurable organopolysiloxane composition comprising an alkali-soluble organopolysiloxane and a photoacid generator,

said organopolysiloxane possessing hydroxyl groups resulting from ring-opening of some or all of epoxides, and being obtained by (co)hydrolytic condensation of at least one silane compound having the formula (1):



wherein R^1 is a monovalent organo group of 2 to 30 carbon atoms having hydrolyzable epoxide, and R^2 is hydrogen or a substituted or unsubstituted monovalent hydrocarbon group of 1 to 10 carbon atoms, and having an average molecular weight of 500 to 50,000 as determined by GPC using polystyrene standards,

wherein said (co)hydrolytic condensation comprises carrying out (co)hydrolysis in the presence of an acid catalyst, thereby forming a (co)hydrolyzate, and then subjecting the (co)hydrolyzate to polycondensation, while alcohol formed and any solvent present is distilled off by heating, thereby yielding a (co)hydrolytic condensate having silanol groups.

Claim 10 (New): The optical waveguide of claim 9, wherein said organopolysiloxane is obtained by cohydrolytic condensation of said at least one silane compound having the formula (1) and additionally at least one silane compound having the formula (2):



wherein R^2 is as defined above and R^3 is a monovalent hydrocarbon group of 1 to 20 carbon atoms, the silane compound of formula (1) being in a proportion of at least 10 mol% based on the entire silane compounds.

Claim 11 (New): The optical waveguide of claim 9, wherein said organopolysiloxane is obtained by cohydrolytic condensation of said at least one silane compound having the formula (1) and additionally at least one silane compound having the formula (2):

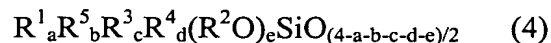


wherein R^2 is as defined above and R^3 is a monovalent hydrocarbon group of 1 to 20 carbon atoms, and at least one silane compound having the formula (3):



wherein R^2 is as defined above and R^4 is a group as represented by R^1 or R^3 , the silane compound of formula (1) being in a proportion of at least 10 mol% based on the entire silane compounds, the silane compound of formula (3) being in a proportion of up to 40 mol% based on the entire silane compounds.

Claim 12 (New): The optical waveguide of claim 11, wherein said organopolysiloxane has the average compositional formula (4):



wherein R^5 is a monovalent organo group of 2 to 30 carbon atoms as represented by R^1 in which the epoxide ring has been opened, the subscripts a, b, c, d and e are positive numbers satisfying $0 \leq a \leq 0.9$, $0.1 \leq b \leq 1.0$, $0.1 \leq a+b \leq 1.0$, $0 \leq c \leq 0.9$, $0 \leq d < 0.8$ and $0 < e \leq 0.5$.

Claim 13 (New): The optical waveguide of claim 9, wherein R^2 is a substituted or unsubstituted alkyl or alkenyl group.

Claim 14 (New): The optical waveguide of claim 10, wherein R^2 is a substituted or unsubstituted alkyl or alkenyl group.

Claim 15 (New): The optical waveguide of claim 11, wherein R^2 is a substituted or unsubstituted alkyl or alkenyl group.

Claim 16 (New): The optical waveguide of claim 12, wherein R^2 is a substituted or unsubstituted alkyl or alkenyl group.

Claim 17 (New): The optical waveguide of claim 9, wherein said photocurable organopolysiloxane composition further comprises a solvent.

Claim 18 (New): The optical waveguide of claim 9, wherein said photocurable organopolysiloxane composition further comprises at least one component selected from the group consisting of a reactive diluent, acid diffusion retarder, photosensitizer, dehydrating agent and microparticulate inorganic oxide.

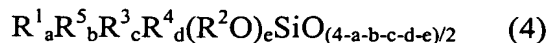
Claim 19 (New): In a method for preparing an optical waveguide from an optical waveguide-forming material by photolithography, the improvement comprising using the optical waveguide-forming material of claim 9.

Claim 20 (New): In a method for preparing an optical waveguide from an optical waveguide-forming material by photolithography, the improvement comprising using the optical waveguide-forming material of claim 10.

Claim 21 (New): In a method for preparing an optical waveguide from an optical waveguide-forming material by photolithography, the improvement comprising using the optical waveguide-forming material of claim 11.

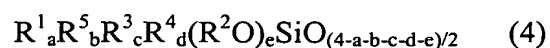
Claim 22 (New): In a method for preparing an optical waveguide from an optical waveguide-forming material by photolithography, the improvement comprising using the optical waveguide-forming material of claim 12.

Claim 23 (New): The optical waveguide of claim 9, wherein said organopolysiloxane has the average compositional formula (4):



wherein R^5 is a monovalent organo group of 2 to 30 carbon atoms as represented by R^1 in which the epoxide ring has been opened, the subscripts a, b, c, d and e are positive numbers satisfying $0 \leq a \leq 0.9$, $0.1 \leq b \leq 1.0$, $0.1 \leq a+b \leq 1.0$, $0 \leq c \leq 0.9$, $0 \leq d < 0.8$ and $0 < e \leq 0.5$.

Claim 24 (New): The optical waveguide of claim 10, wherein said organopolysiloxane has the average compositional formula (4):



wherein R^5 is a monovalent organo group of 2 to 30 carbon atoms as represented by R^1 in which the epoxide ring has been opened, the subscripts a, b, c, d and e are positive numbers satisfying $0 \leq a \leq 0.9$, $0.1 \leq b \leq 1.0$, $0.1 \leq a+b \leq 1.0$, $0 \leq c \leq 0.9$, $0 \leq d < 0.8$ and $0 < e \leq 0.5$.

DISCUSSION OF THE AMENDMENT

All of the claims have been canceled and replaced with new Claims 9-24. Claims 9-12 are analogous to original Claims 1-4, respectively, except that they are drawn to an optical waveguide formed from an optical waveguide-forming material, as supported by original Claim 7. Claim 9 also includes product by process language, as supported in the specification at page 4, lines 32-33, combined with the disclosure at page 7, line 29, through page 8, line 15. Claims 13-16 are supported in the specification at page 6, lines 1-2. Claim 17 and 18 are analogous to original Claims 5 and 6, respectively. Claims 19-22 are analogous to original Claim 8. Finally, Claims 23 and 24 are analogous to Claim 12, but depend on Claims 9 and 10, respectively

No new matter is believed to have been added by the above amendment. Claims 9-24 are now pending in the application.